

## Post-doctoral position in submarine neo-tectonics and geomorphology At the Earth science research lab Géoazur (Sophia-Antipolis, France)

We are currently searching a highly motivated and qualified scientist at the postdoctoral level to join the Sersurf project (Seismic Rupture of Submarine Normal Faults) funded by the French National Research Agency (ANR), for an appointment of up to 24 months and starting in early 2018. The SerSurf project (PI: J. Escartin, IPGP), that runs till mid-2021, is an inter-disciplinary project involving a collaborative team from 5 national partners (IPGP, U. Lyon, ParisSud, IFREMER, in addition to GéoAzur), in addition to 4 international partners, in the field of tectonics, submarine geology and geophysics, volcanology, petrology and image processing.

The SerSurF project is focused on the acquisition and analysis of submarine observations of length, displacement and nature of co-seismic seafloor ruptures, and of longer-term volcano-tectonic interactions. These observations are required to evaluate seismic and tsunami hazard in the short term, and characterize the long-term dynamic response of faults to earthquakes. The project associated with this post-doc will focus on the **detailed fault morphology, necessary to understand fault evolution, constrain the links between tectonic deformation, erosion and sedimentation in a submarine environment**. While this type of study is routinely carried out on land, direct submarine observations so far have not provided systematic and complete information on submarine fault ruptures due to the technological difficulties of working underwater. However, last April we carried out the SUBSAINTES cruise, designed to acquire appropriate high-resolution optical and acoustic data for that purpose, specifically targeting active faults that produced a Mw6.3 earthquake and tsunami in 2004, in the Lesser Antilles (French West Indies), in addition to other targets to understand the wider volcano-tectonic history of the area. The data that will be analyzed within this post-doctoral research project include microbathymetry and sonar data acquired with underwater vehicles at very high resolution (1 m), video imagery and photos (geological observations), photomosaics and 3D terrain models from imagery, in addition to geological samples.

We seek a candidate with experience in neotectonics, marine geology and geophysics and/or quantitative geomorphology. The successful candidate should hold a PhD or equivalent degree in the earth sciences, defended after January 2016, or demonstrate that he/she is near-completion of his degree. The candidate should have a demonstrated quantitative approach and numerical skills (e.g., Matlab, GMT), with ability to handle both numerical data (eg., bathymetry grids, vehicle navigation, imagery), and also have a result-oriented proactive attitude for publishing scientific results in top refereed journals. Excellent knowledge in English, both in speaking and writing, is a requirement. The candidate is expected to collaborate within the ANR project with other partners, and develop a multidisciplinary approach.

### Details and Application procedure

The position is full time and open as early as January 2018, with possibility of starting preferentially during the first quarter of 2018. **Applications will be reviewed until the position is filled.** Duration will be 12 to 24 months depending on experience and start of the position. Net income will be in the range of 2000-2800€/month depending on the CNRS standards, and based on the candidate’s experience.

Applications should include 1) a motivation letter with proposed position starting date, and a personal view of the type of research to be conducted during the post-doc, 2) a curriculum vitae, including at least 2 references with name, address, e-mail, and professional relation, 3) a short synopsis of previous research achievements and research interests, with a list of publications and communications.

Applications and inquiries should be sent by email at [Frederique.leclerc@geoazur.unice.fr](mailto:Frederique.leclerc@geoazur.unice.fr) with email subject “Sersurf Postdoc position”.

### Additional information

Géoazur is an academic research unit located in Sophia-Antipolis, a leading European technology park, just outside the city of Nice. The Research lab is part of the University Côte d’Azur (UCA) and Observatory Côte d’Azur (OCA).

#### Géoazur

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